

WHAT IS CLAIMED IS:

1. A non-halogen series floor material, comprising:

a first intermediate resin layer containing filler of 100 to 400 mass parts with respect to resin ingredient of 100 mass parts, said resin ingredient consisting essentially of resin having no chlorine atom in chemical structure;

a surface resin layer integrally formed at an upper surface side of said first intermediate resin layer, said surface resin layer containing resin having no chlorine atom in chemical structure and having a thickness of 100 to 1,000 μm ;

a second intermediate resin layer integrally formed at a lower surface side of said first intermediate resin layer, said second intermediate resin layer containing resin having no chlorine atom in chemical structure and filler of 0 to 200 mass parts with respect to resin ingredient of 100 mass parts; and

a backing layer integrally formed at a lower surface side of said second intermediate resin layer, said backing layer being formed of a fibrous fabric constituted by fibers containing resin having no chlorine atom in chemical structure,

wherein a content ratio of said filler in said second intermediate resin layer with respect to said resin ingredient of said second intermediate resin layer is smaller than a content ratio of said filler in said first intermediate resin layer with respect to said resin ingredient of said first intermediate resin layer,

wherein a thickness of said second intermediate resin layer is 100 μm or more, and

wherein a thickness of said second intermediate resin layer is 50% or less of a total thickness of three resin layers of said surface resin layer, said first intermediate resin layer and said second intermediate resin layer.

2. The non-halogen series floor material as recited in claim 1, wherein said surface resin layer is a monolayer structure containing olefin series resin as a main resin ingredient.

3. The non-halogen series floor material as recited in claim 1, wherein said surface resin layer is a monolayer structure containing polypropylene resin as a main resin ingredient.

4. The non-halogen series floor material as recited in claim 1, wherein said surface resin layer is a lamination structure in which at least an uppermost surface layer contains olefin series resin as a main resin ingredient.

5. The non-halogen series floor material as recited in claim 1, wherein said surface resin layer is a lamination structure in which at least an uppermost surface layer contains polypropylene series resin as a main resin ingredient.

6. The non-halogen series floor material as recited in claim 1, wherein a thickness of said surface resin layer is 200 to 600 μm .

7. The non-halogen series floor material as recited in claim 1, wherein said first intermediate resin layer contains pattern-forming members capable of being seen via said surface resin layer.

8. The non-halogen series floor material as recited in claim 1, wherein said first intermediate resin layer contains coloring pigment capable of being seen via said surface resin layer.

9. The non-halogen series floor material as recited in claim 8, wherein said coloring pigment is contained by 0.1 to 5 mass% with respect to an entire amount of said first intermediate resin layer.

10. The non-halogen series floor material as recited in claim 1, wherein said first intermediate resin layer contains pattern-forming members and coloring pigment capable of being seen via said surface resin layer.

11. The non-halogen series floor material as recited in claim 1, wherein the following formula is satisfied:

$$1.0 < X/Y \leq 2.0$$

where "X" is a degree of elasticity of said second intermediate resin layer, and "Y" is a degree of elasticity of said surface resin layer.

12. The non-halogen series floor material as recited in claim 1, wherein the following formula is satisfied:

$$1.1 \leq X/Y \leq 1.5$$

where "X" is a degree of elasticity of said second intermediate resin layer, and "Y" is a degree of elasticity of said surface resin layer.

13. The non-halogen series floor material as recited in claim 1, wherein said second intermediate resin layer contains filler of 0 to 100 mass parts with respect to resin ingredient of 100 mass parts.

14. The non-halogen series floor material as recited in claim 1, wherein a content ratio of said filler in said second intermediate resin layer with respect to said resin ingredient of said second intermediate resin layer is less than one half of a content ratio of said filler in said first intermediate resin layer with respect to said resin ingredient of said first intermediate resin layer.

15. The non-halogen series floor material as recited in claim 1, wherein a thickness of said second intermediate resin layer is

200 μm or more, but 30% or less of a total thickness of three resin layers of said surface resin layer, said first intermediate resin layer and said second intermediate resin layer.

16. The non-halogen series floor material as recited in claim 1, wherein a total thickness of said first intermediate resin layer and said second intermediate resin layer is 1 to 5 mm.

17. The non-halogen series floor material as recited in claim 1, wherein a total thickness of said first intermediate resin layer and said second intermediate resin layer is 1.5 to 4 mm.

18. The non-halogen series floor material as recited in claim 1, wherein a weight per unit area of said backing layer is 30 to 100 g/m^2 .

19. The non-halogen series floor material as recited in claim 1, further comprising a printing layer integrally formed on a lower surface of said surface resin layer.

20. A non-halogen series floor material, comprising:
a first intermediate resin layer containing filler of 100 to 400 mass parts with respect to resin ingredient of 100 mass parts, said resin ingredient consisting essentially of resin having no chlorine atom in chemical structure;

a surface resin layer integrally formed at an upper surface side of said first intermediate resin layer, said surface resin layer containing resin having no chloride atom in chemical structure and having a thickness of 100 to 1,000 μm ;

a second intermediate resin layer integrally formed at a lower surface side of said first intermediate resin layer, said second intermediate resin layer containing resin having no chloride atom in chemical structure and filler of 0 to 200 mass parts with respect to resin ingredient of 100 mass parts; and

a backing layer integrally formed at a lower surface side of said second intermediate resin layer, said backing layer being formed of a fibrous fabric constituted by fibers containing resin having no chloride atom in chemical structure,

wherein a content ratio of said filler in said second intermediate resin layer with respect to said resin ingredient of said second intermediate resin layer is smaller than a content ratio of said filler in said first intermediate resin layer with respect to said resin ingredient of said first intermediate resin layer,

wherein a thickness of said second intermediate resin layer is 100 μm or more, and

wherein a thickness of said second intermediate resin layer is 50% or less of a total thickness of three resin layers of said surface resin layer, said first intermediate resin layer and said second intermediate resin layer,

wherein said surface resin layer is a monolayer structure

containing olefin series resin as a main resin ingredient or a lamination structure in which at least an uppermost surface layer contains olefin series resin as a main resin ingredient,

wherein the following formula is satisfied:

$$1.0 < X/Y \leq 2.0$$

where "X" is a degree of elasticity of said second intermediate resin layer, and "Y" is a degree of elasticity of said surface resin layer, and

wherein a weight per unit area of said backing layer is 30 to 100 g/m².

21. A non-halogen series floor material, comprising:

a first intermediate resin layer containing filler of 100 to 400 mass parts with respect to resin ingredient of 100 mass parts, said resin ingredient consisting essentially of resin having no chlorine atom in chemical structure;

a surface resin layer integrally formed at an upper surface side of said first intermediate resin layer, said surface resin layer containing resin having no chloride atom in chemical structure and having a thickness of 200 to 600 μm ;

a second intermediate resin layer integrally formed at a lower surface side of said first intermediate resin layer, said second intermediate resin layer containing resin having no chloride atom in chemical structure and filler of 0 to 200 mass parts with respect to resin ingredient of 100 mass parts; and

a backing layer integrally formed at a lower surface side of said second intermediate resin layer, said backing layer being formed of a fibrous fabric constituted by fibers containing resin having no chloride atom in chemical structure,

wherein a content ratio of said filler in said second intermediate resin layer with respect to said resin ingredient of said second intermediate resin layer is one half or less of a content ratio of said filler in said first intermediate resin layer with respect to said resin ingredient of said first intermediate resin layer,

wherein a thickness of said second intermediate resin layer is 200 μm or more, and

wherein a thickness of said second intermediate resin layer is 30% or less of a total thickness of three resin layers of said surface resin layer, said first intermediate resin layer and said second intermediate resin layer,

wherein a total thickness of two layers of said first intermediate resin layer and said second intermediate resin layer is 1 to 5 mm,

wherein said surface resin layer is a monolayer structure containing polypropylene resin as a main resin ingredient or a lamination structure in which at least an uppermost surface layer contains polypropylene resin as a main resin ingredient,

wherein the following formula is satisfied:

$$1.1 \leq X/Y \leq 1.5$$

where "X" is a degree of elasticity of said second intermediate resin layer, and "Y" is a degree of elasticity of said surface resin layer, and

wherein a weight per unit area of said backing layer is 30 to 100 g/m².